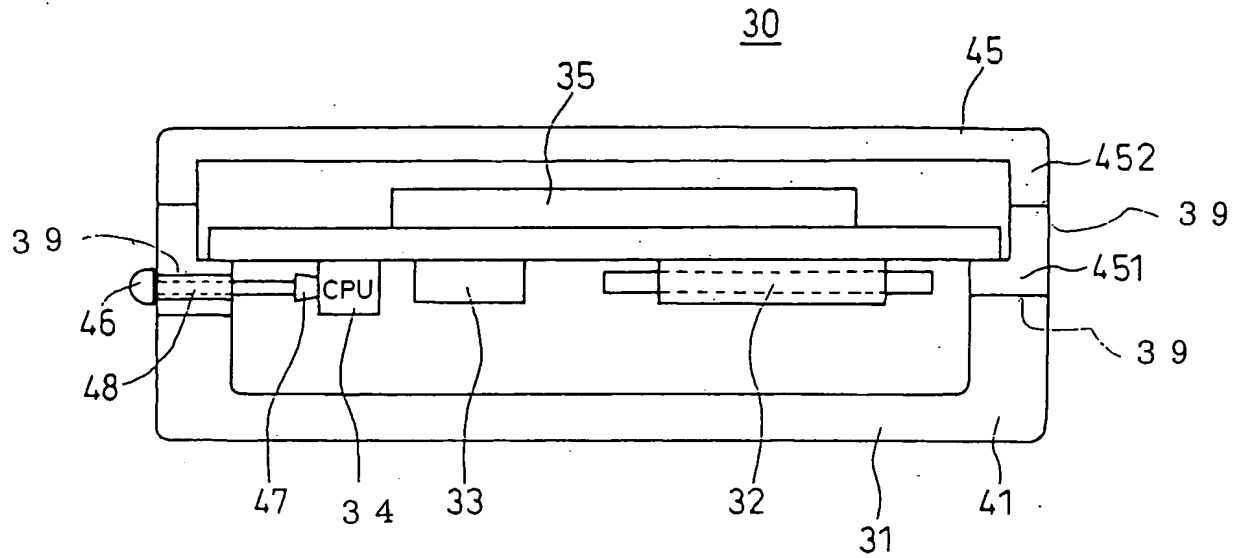
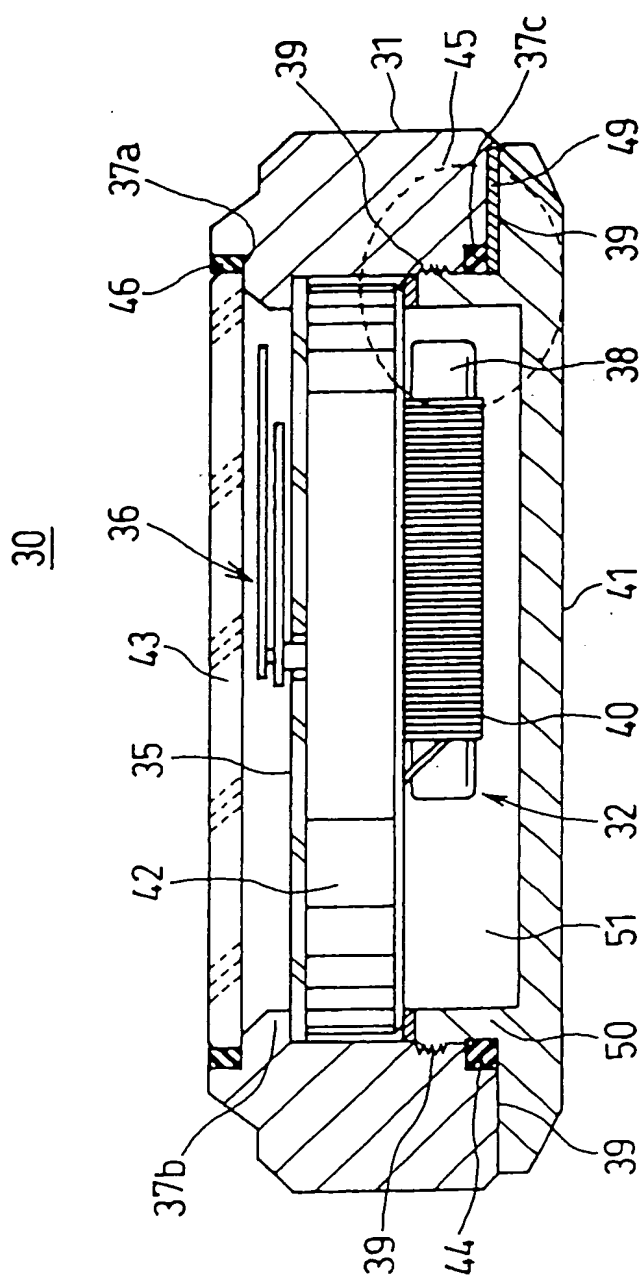


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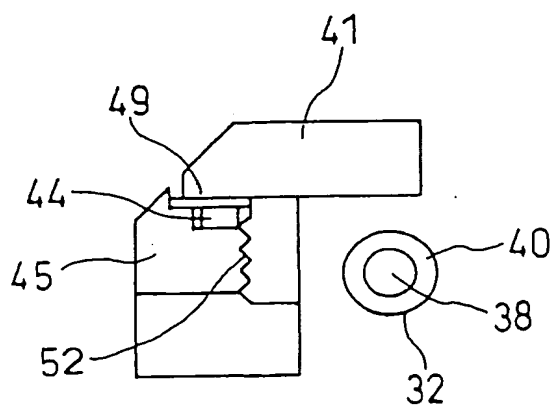
Fig. 1

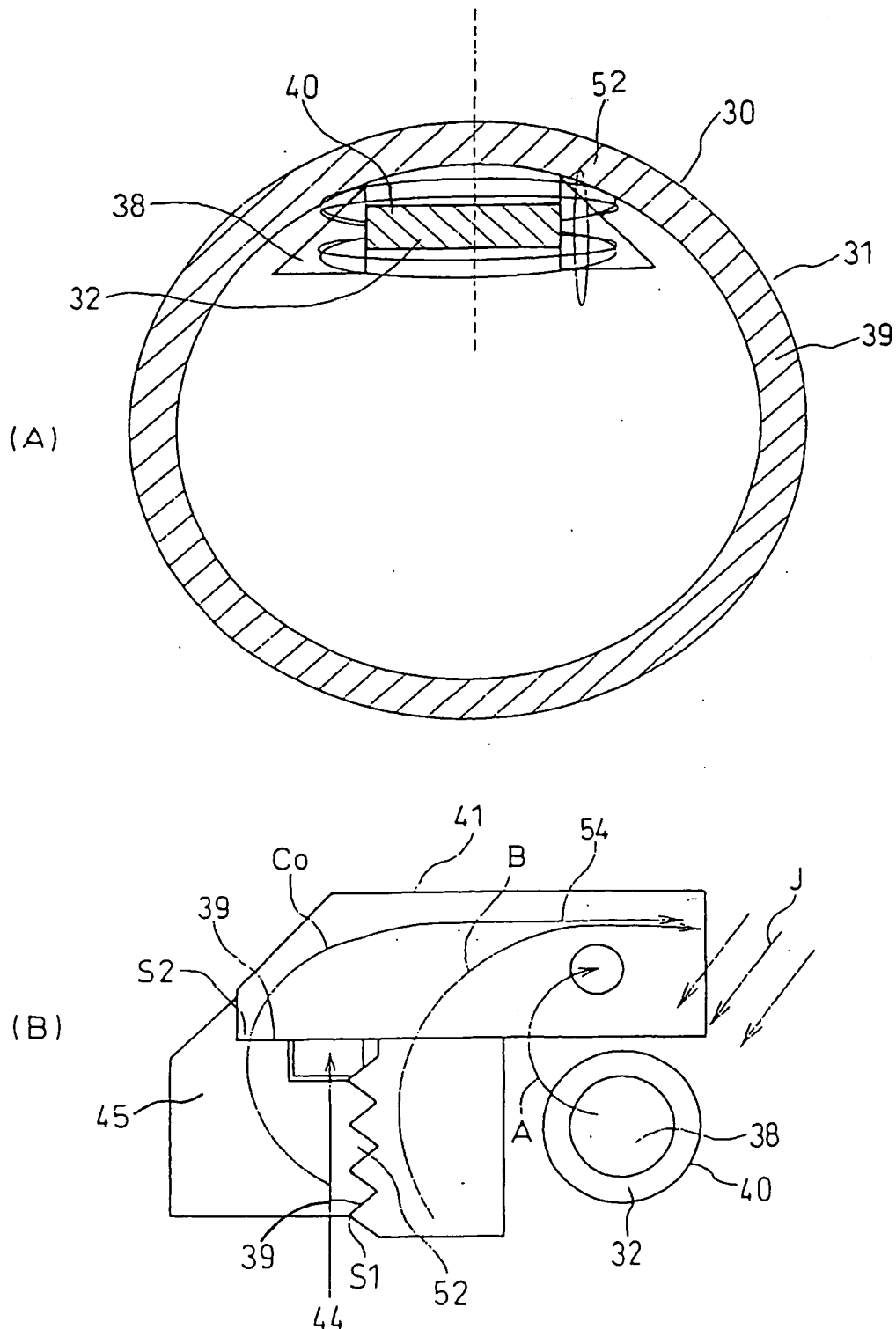




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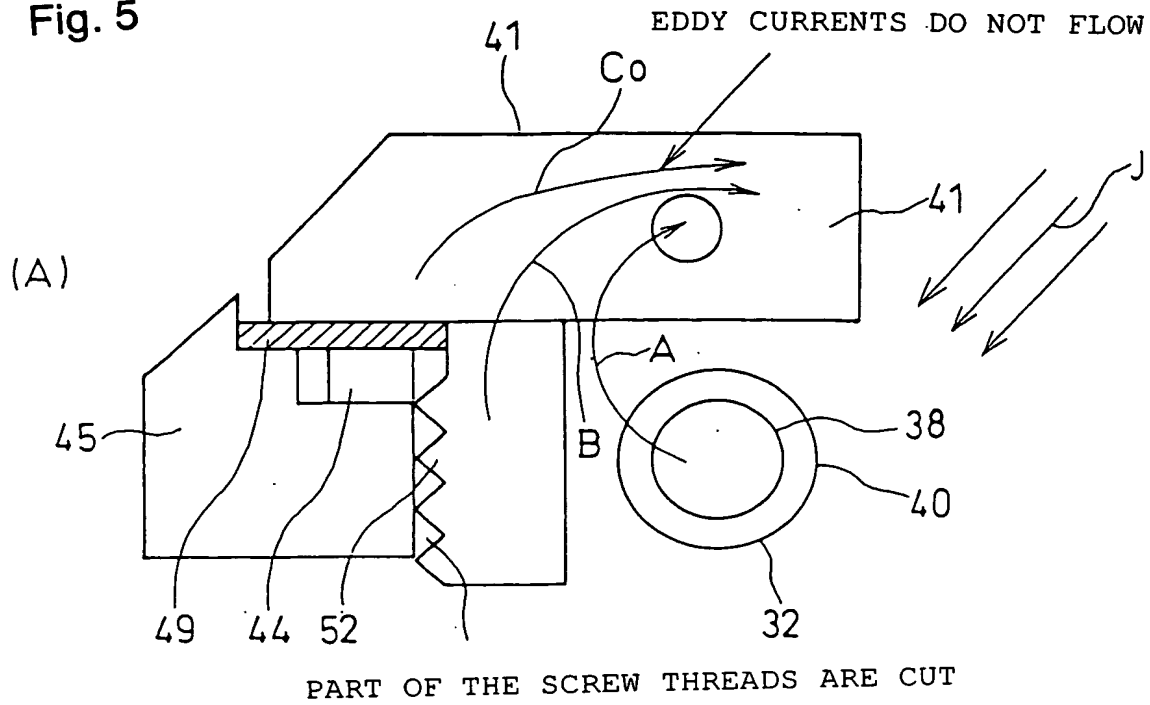
Fig. 3





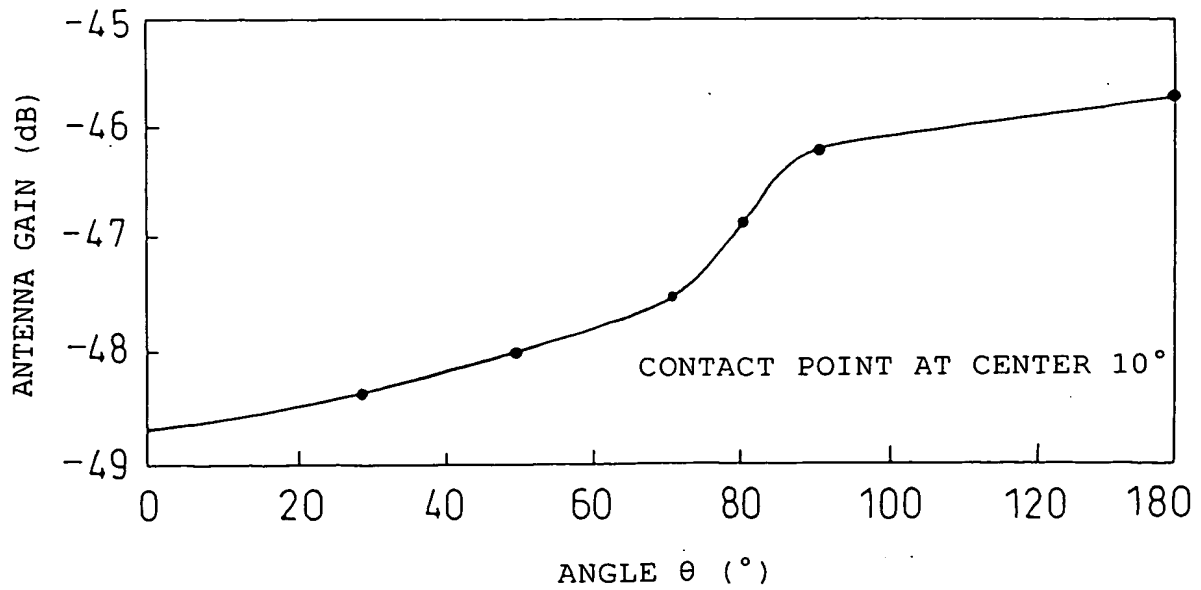
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Fig. 5



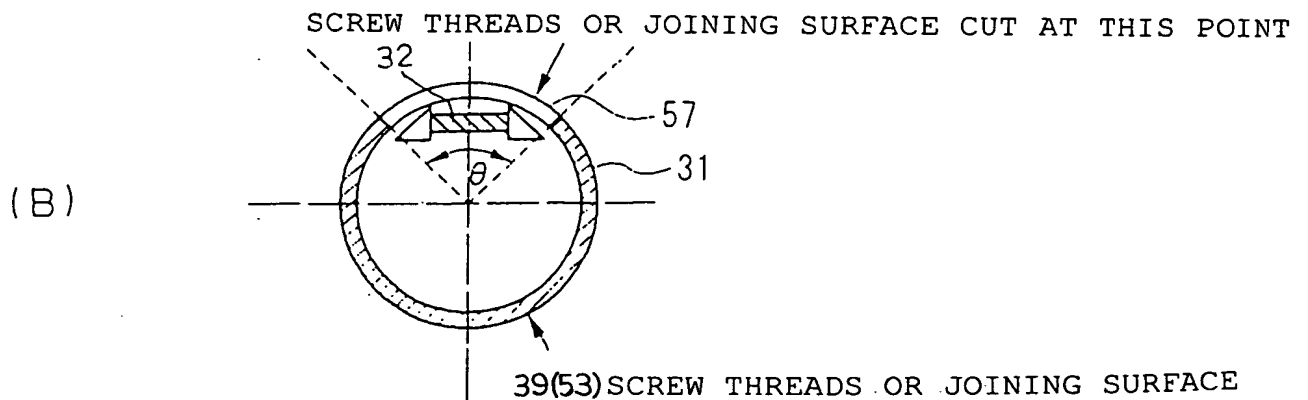
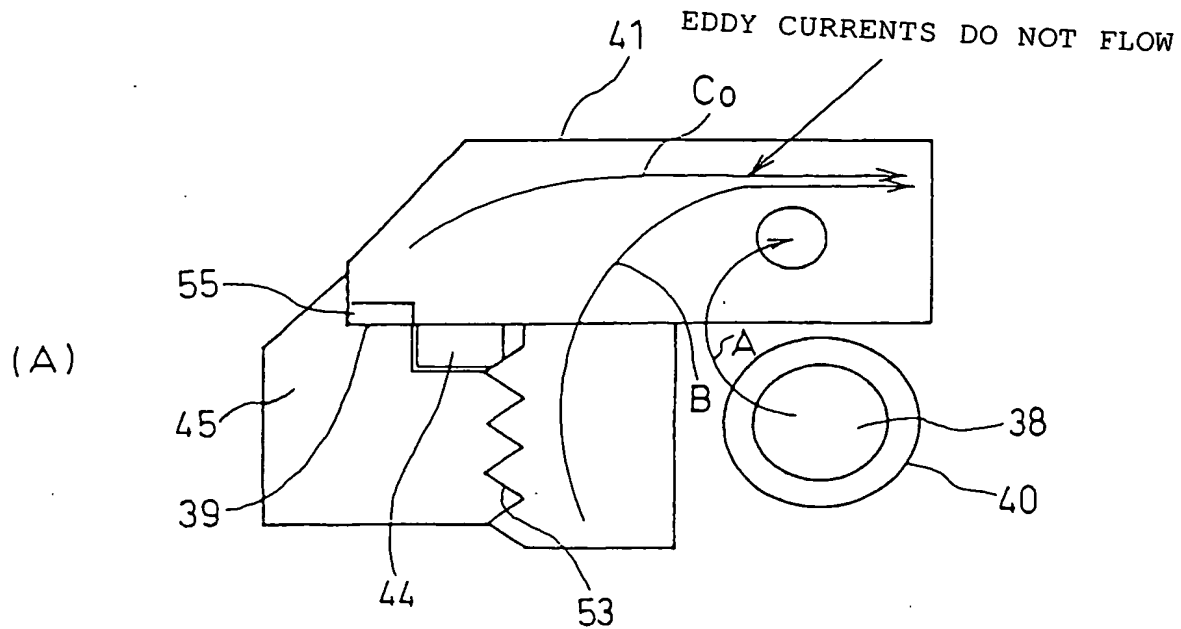
(B)

EFFECT ON GAIN OF REMOVING SCREW THREADS



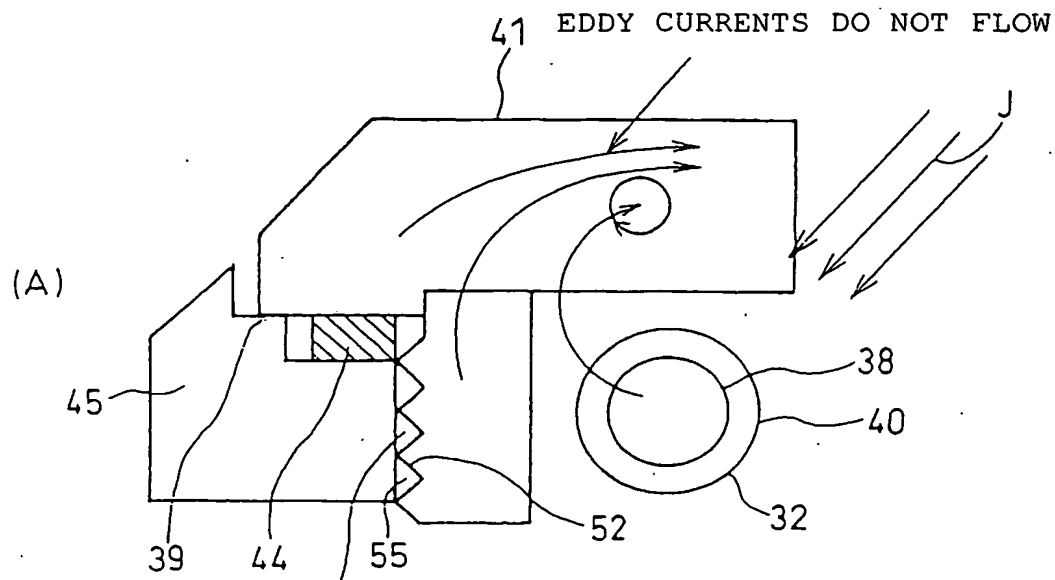
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Fig. 6



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Fig. 7



PART OF SCREW THREADS CUT

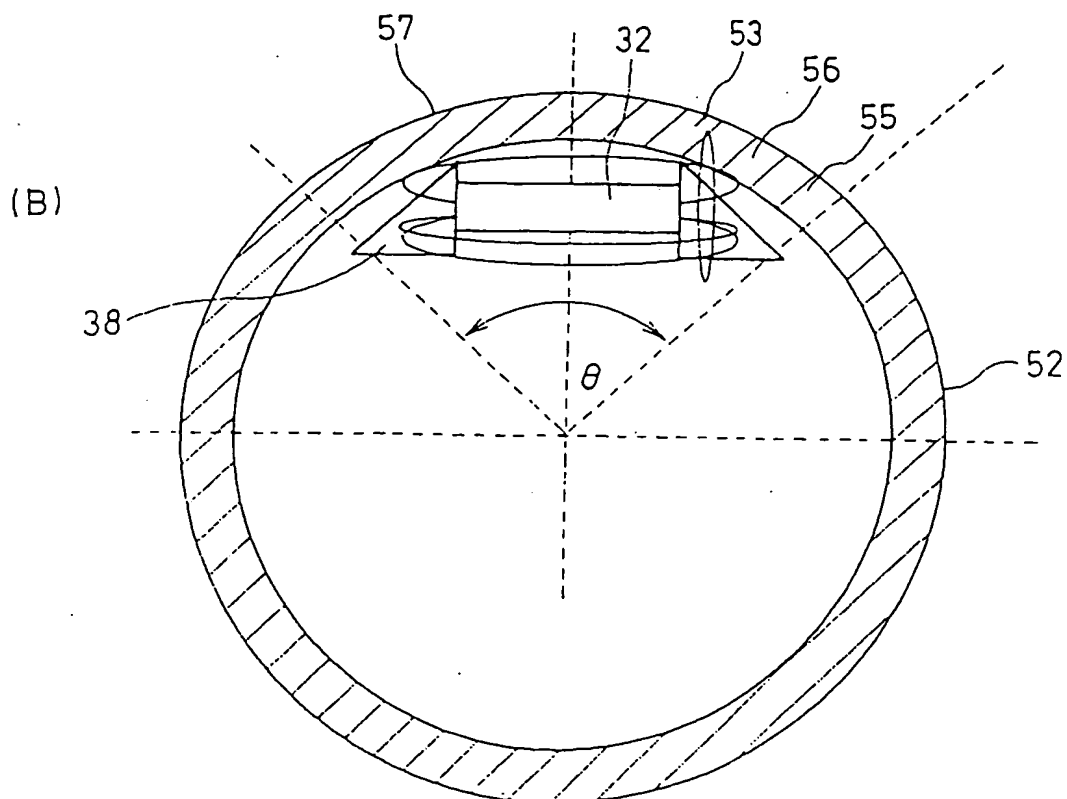
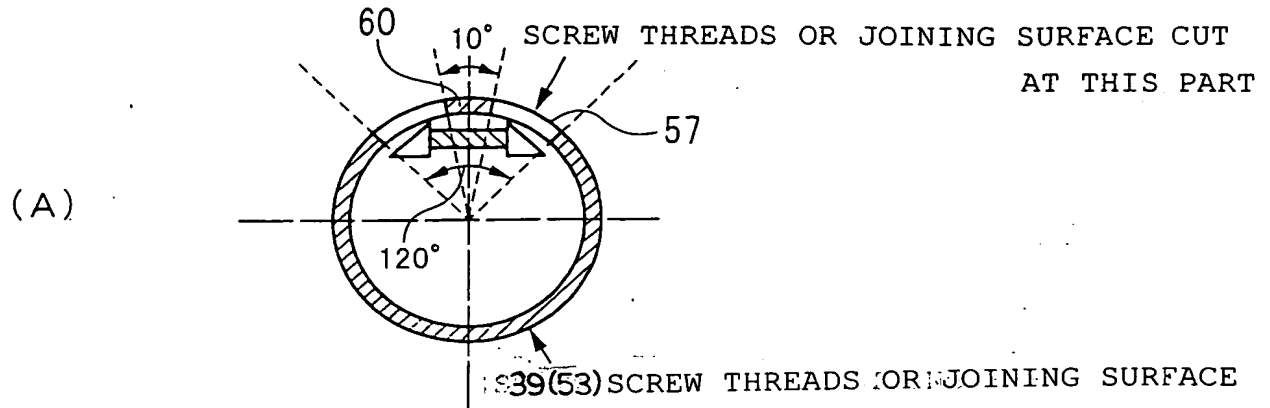


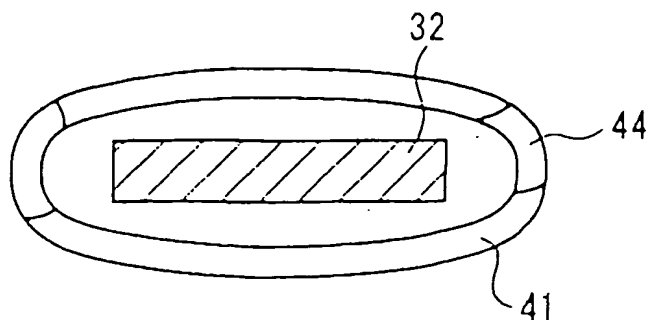
Fig. 8



(B)

	BEFORE CHANGE	AFTER CHANGE	NO 10° CONTACT POINT
RESONANT FREQUENCY (KHz)	41.4	41.6	40
GAIN (dB)	-48.69	-48.16	-45.9
BANDWIDTH (Hz)	7845	7412	5832
Q	5.24	5.47	6.82

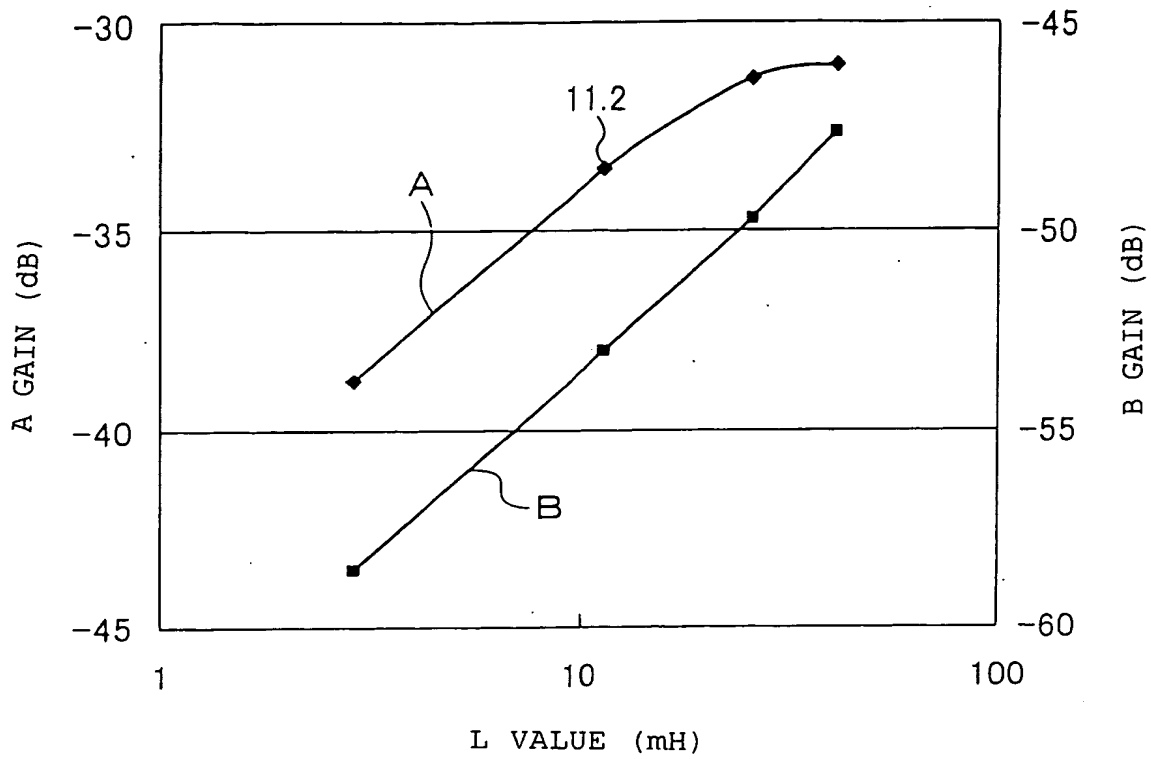
Fig. 9



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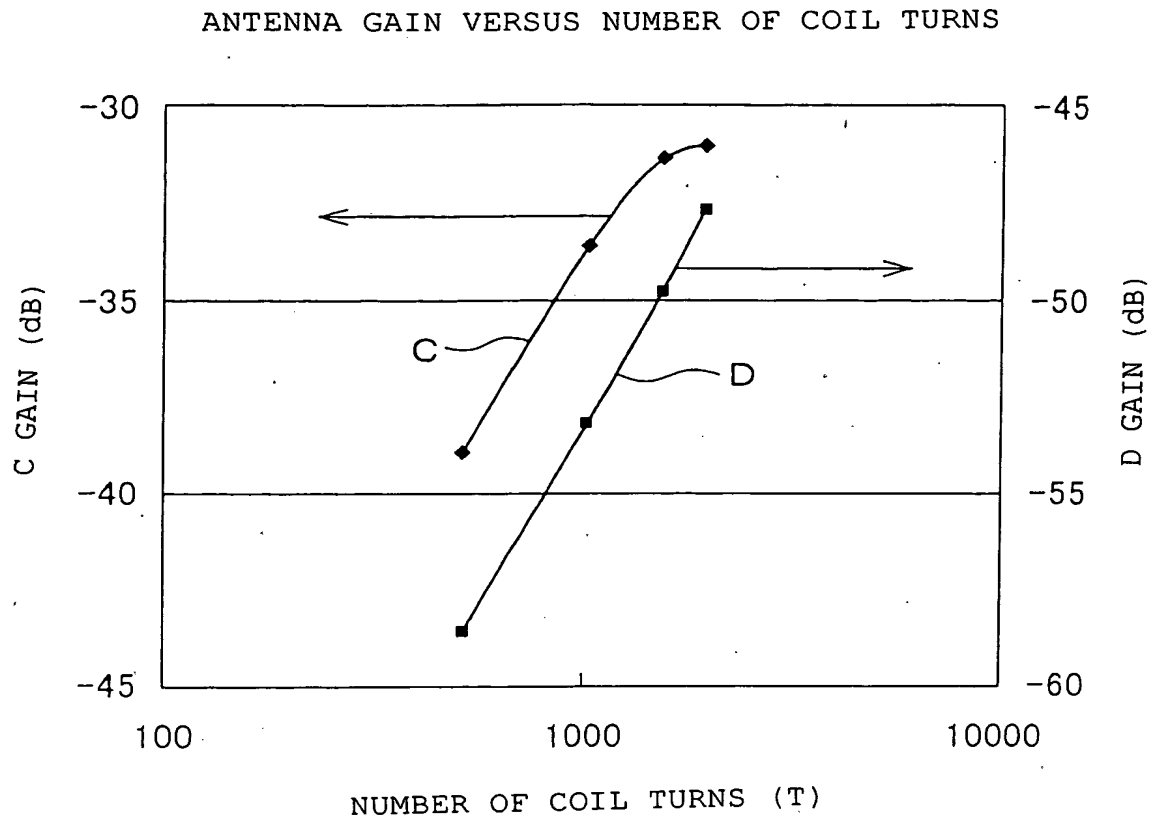
Fig. 10

ANTENNA GAIN VERSUS L VALUE



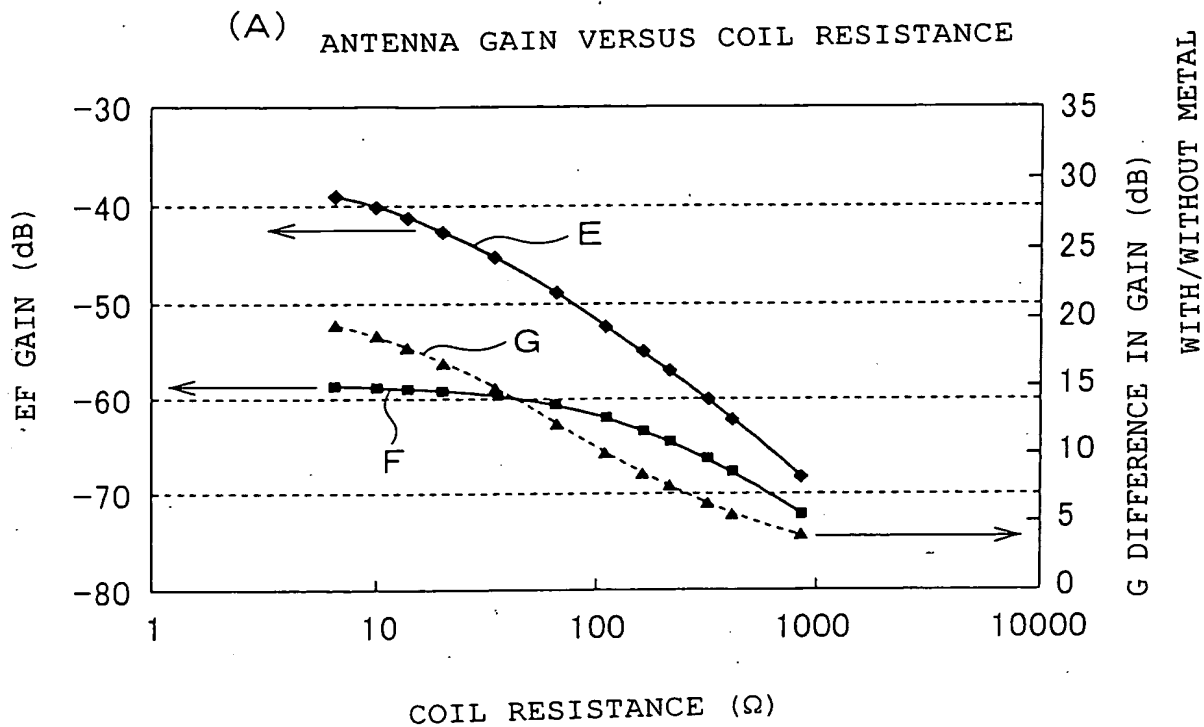
10/34

Fig. 11

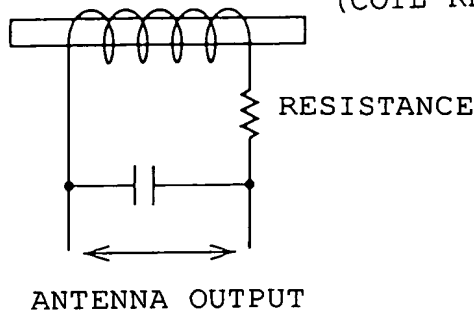


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Fig. 12

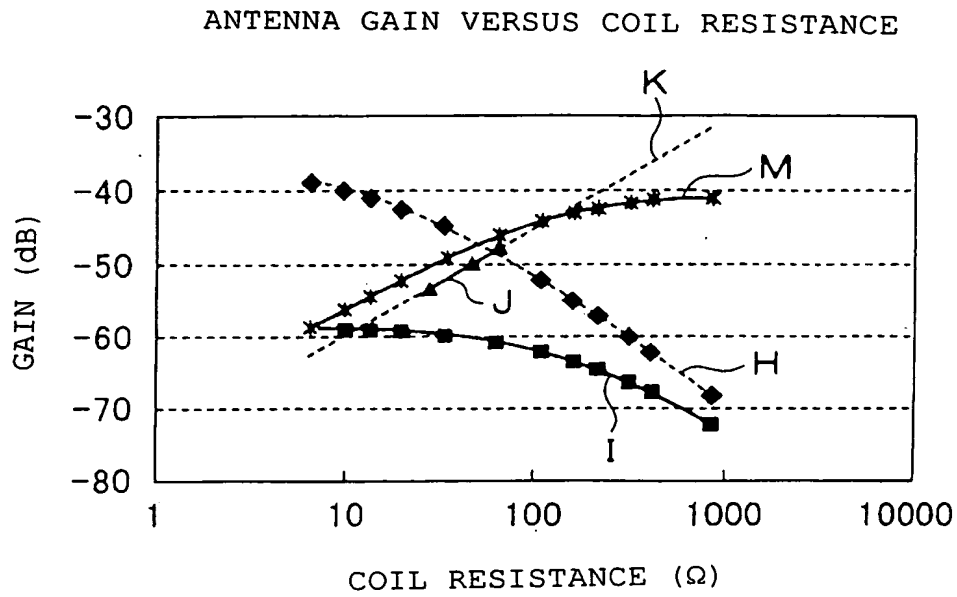


(B) NUMBER OF TURNS: 500 T
(COIL RESISTANCE: 6.4 Ω)



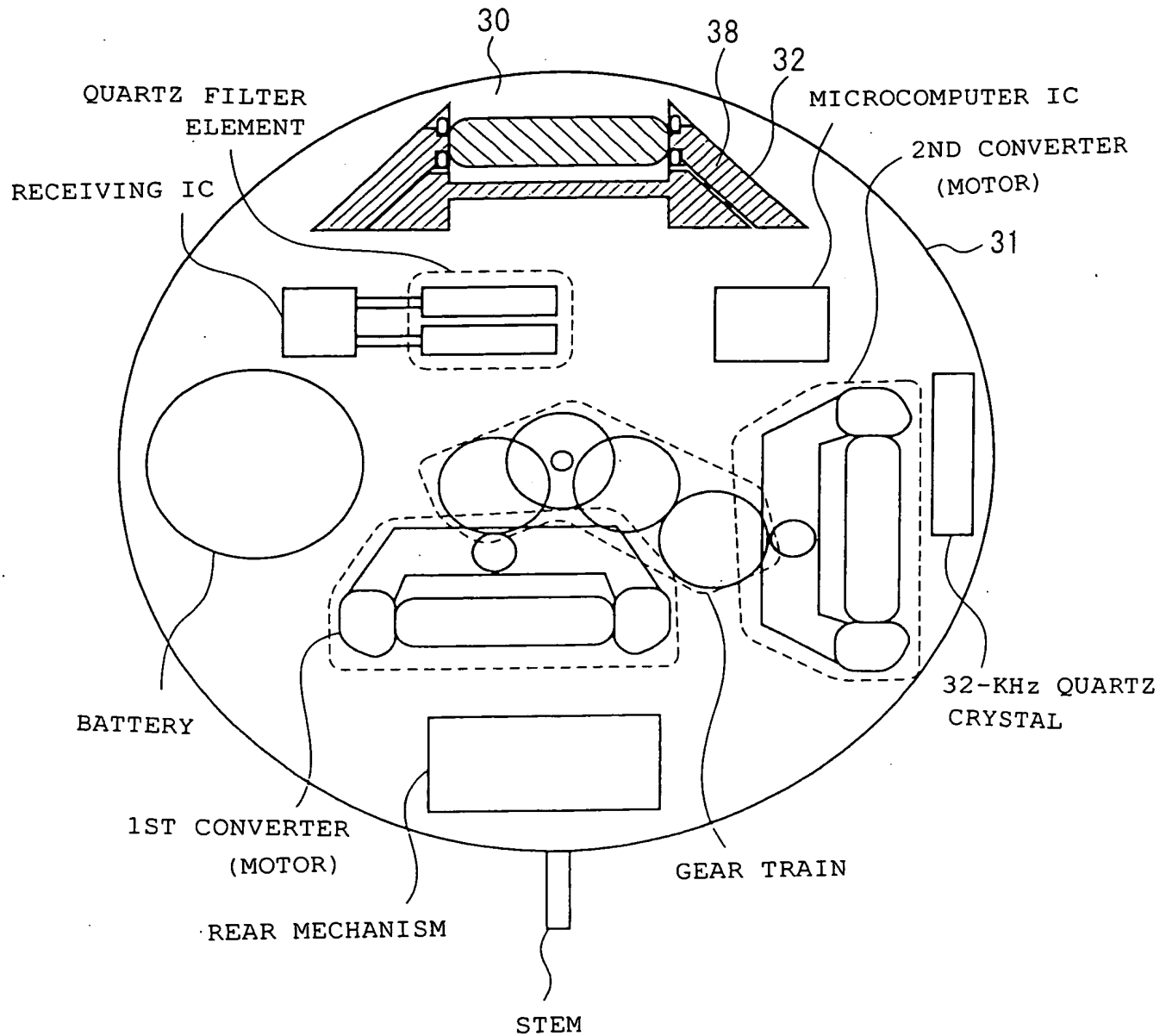
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Fig. 13



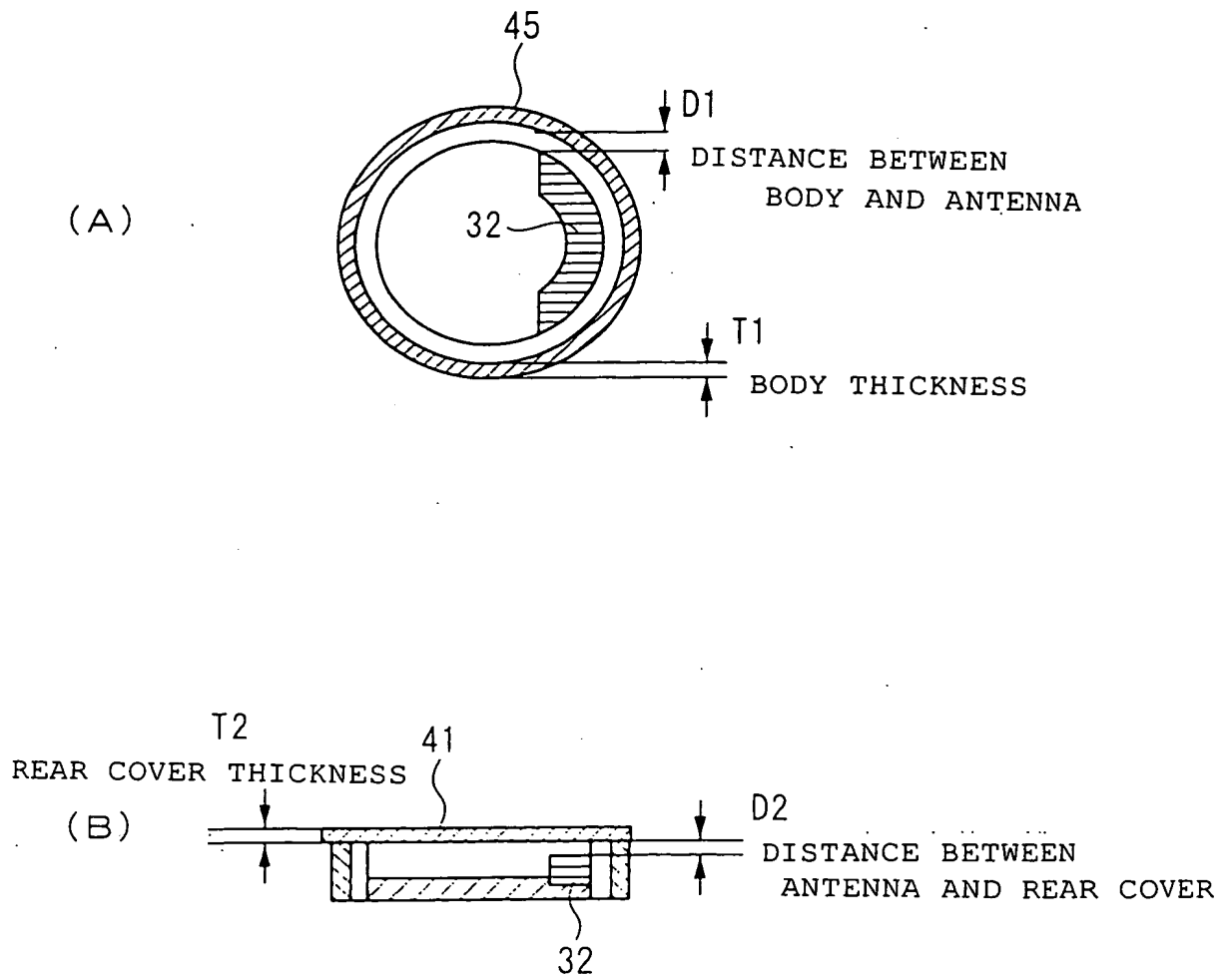
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Fig. 14



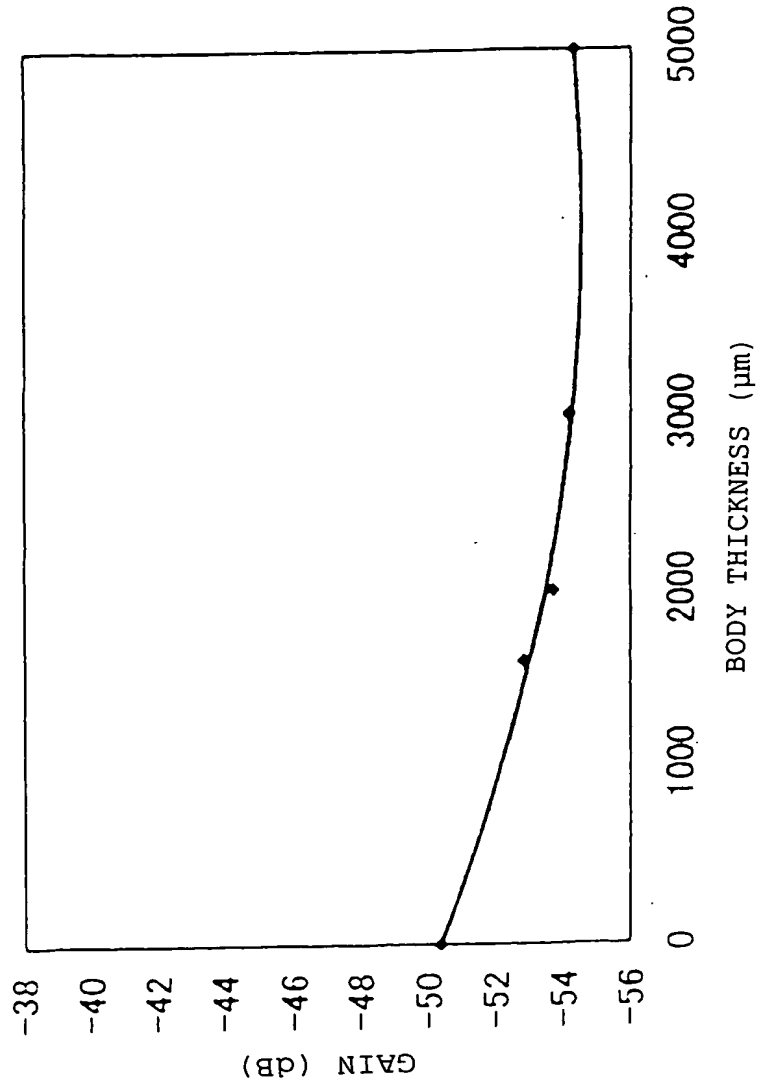
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Fig. 15



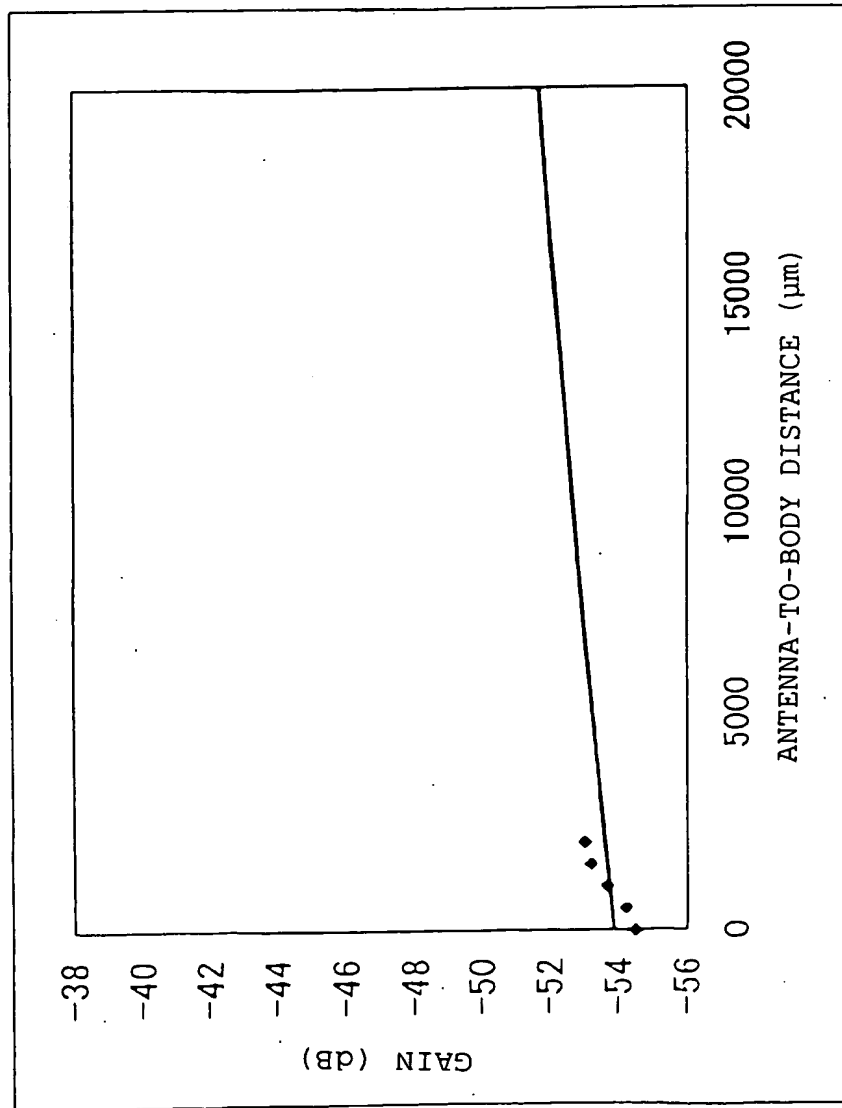
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Fig. 16



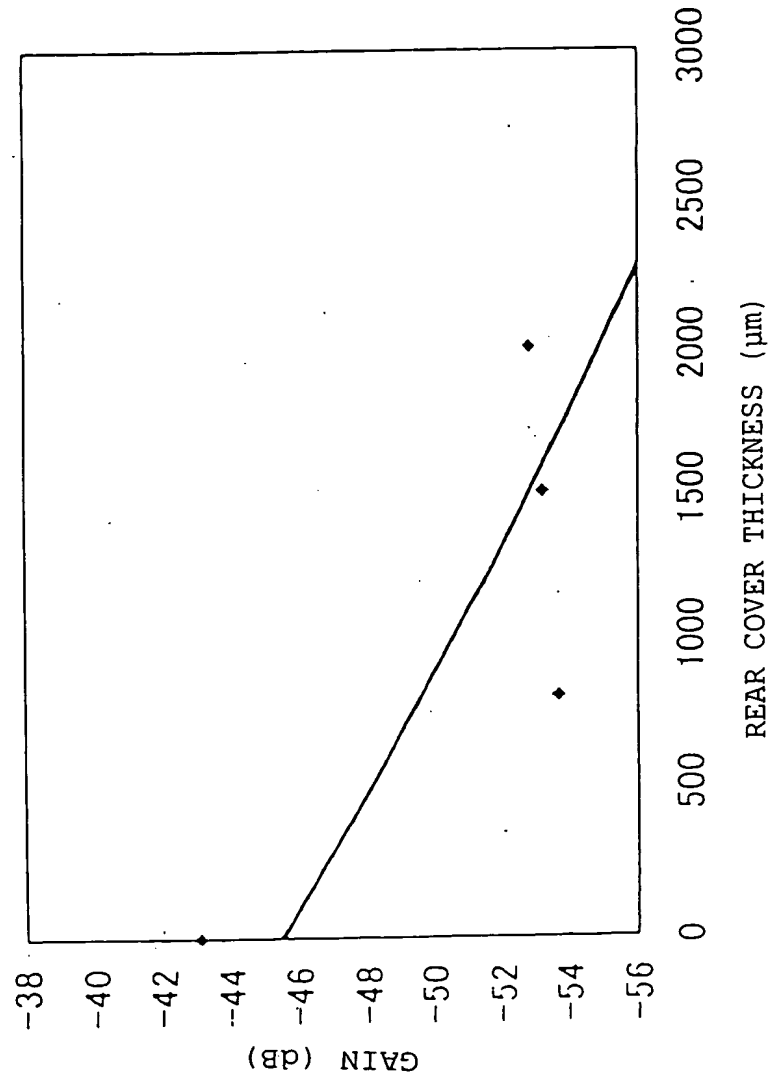
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Fig. 17



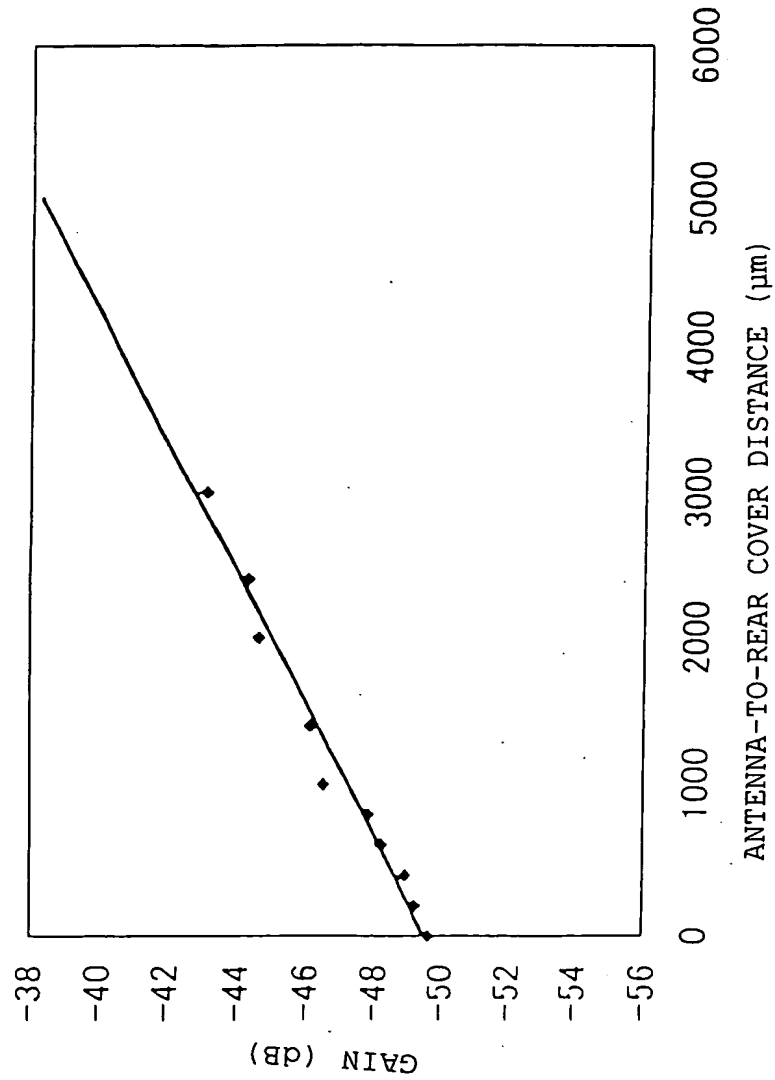
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Fig. 18



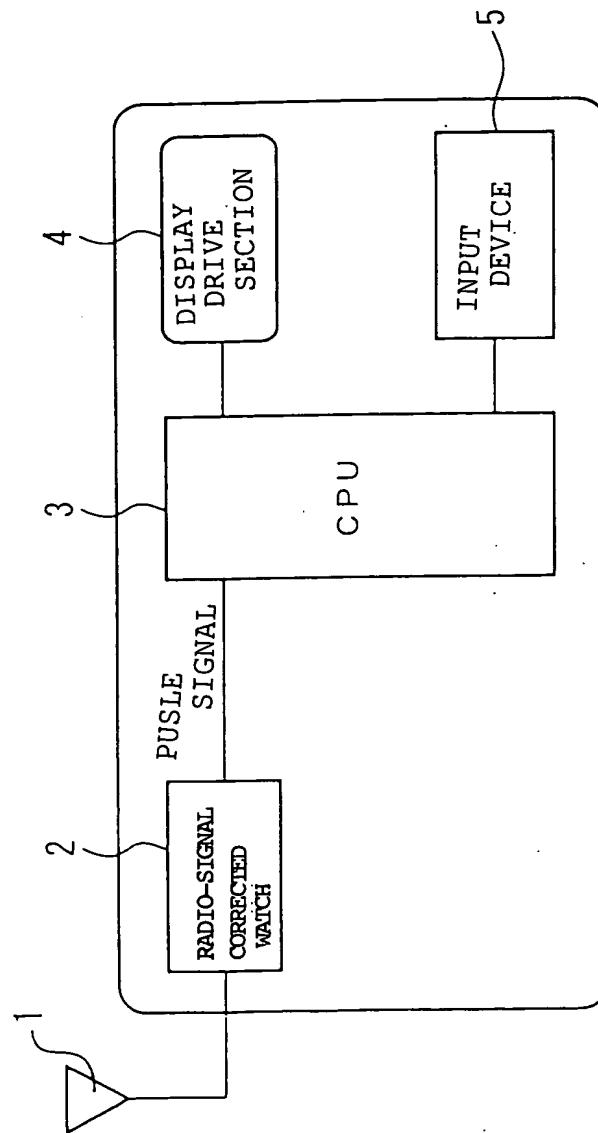
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Fig. 19



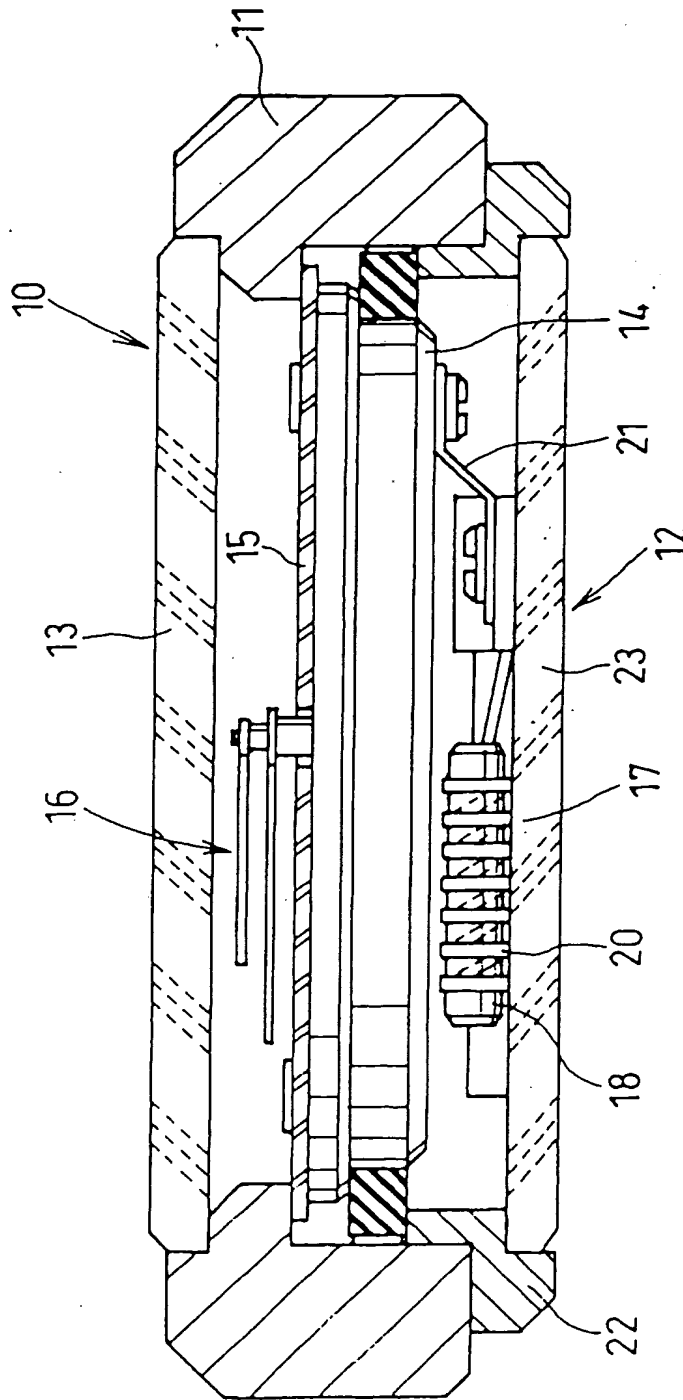
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Fig. 20



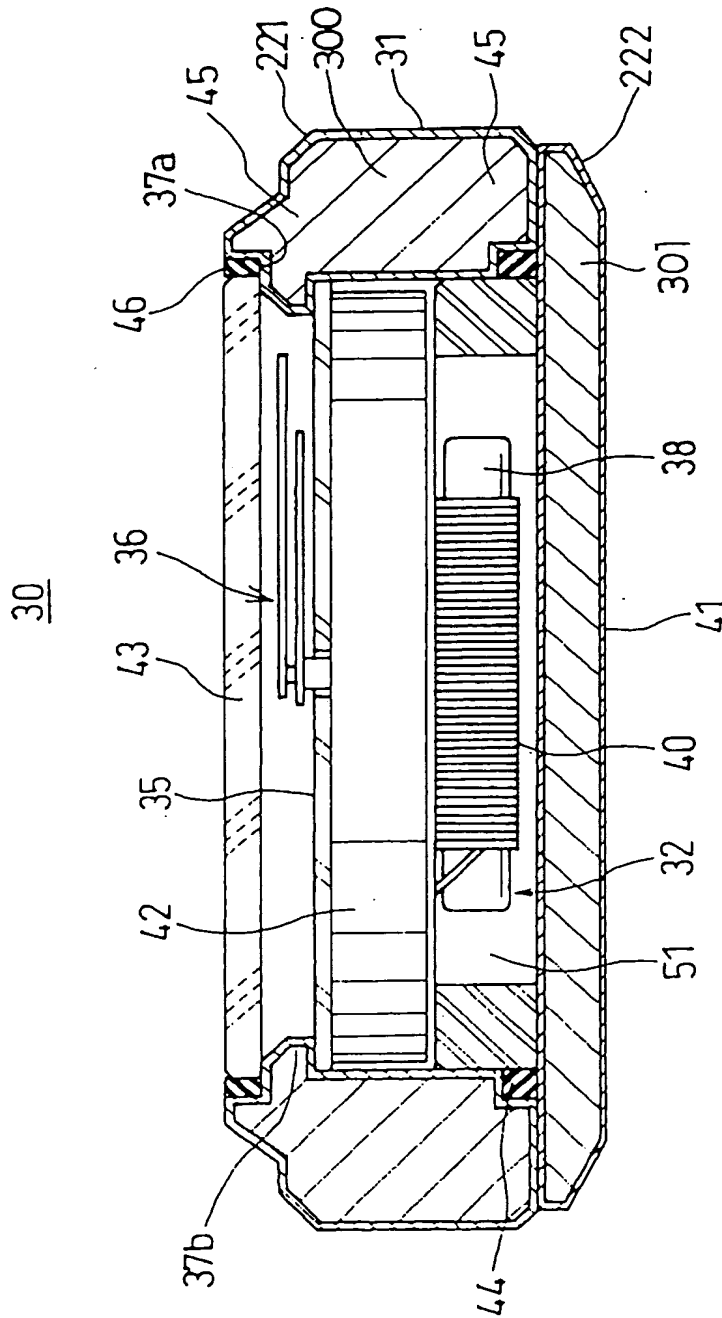
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Fig. 21



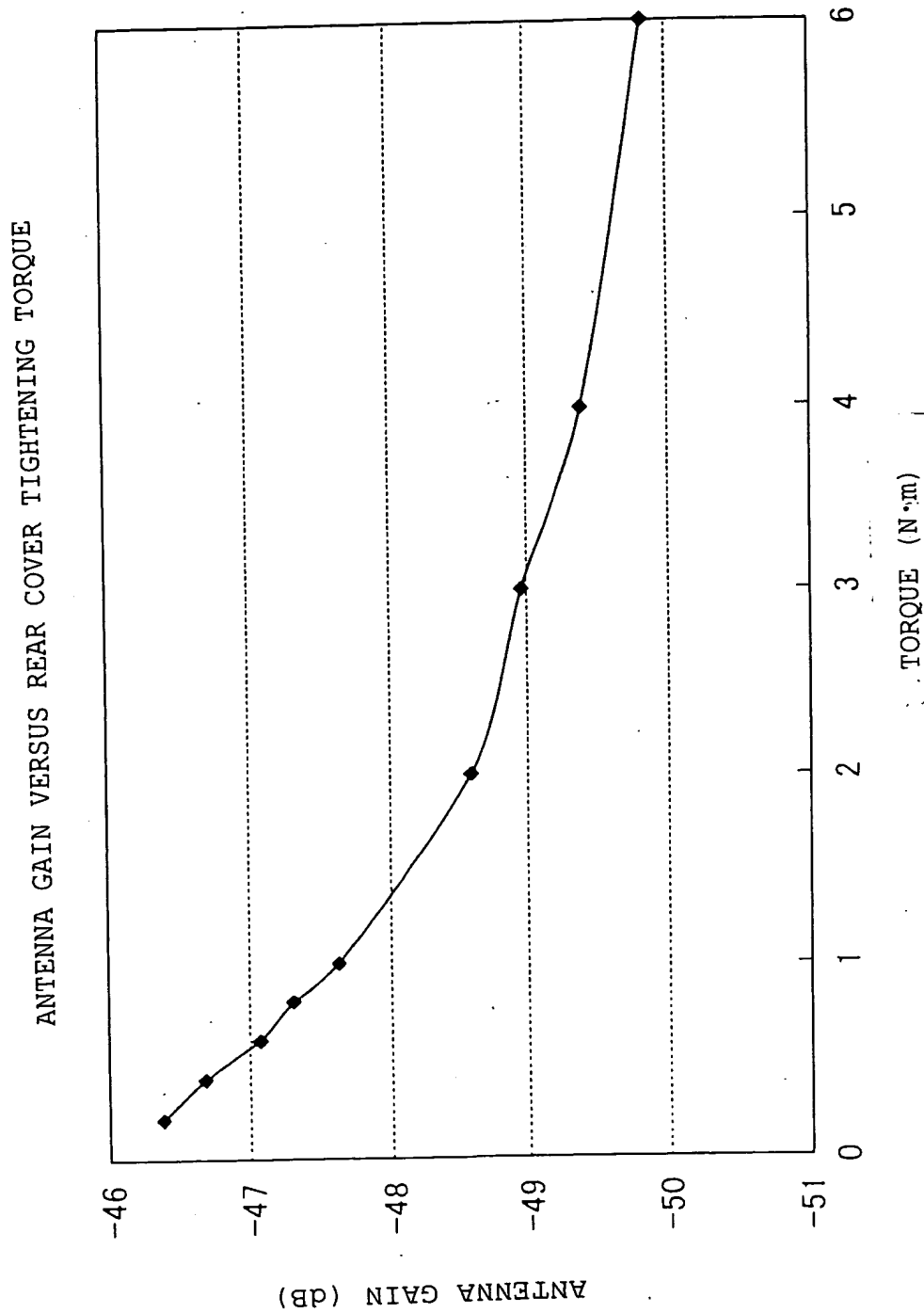
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Fig. 22



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Fig. 23



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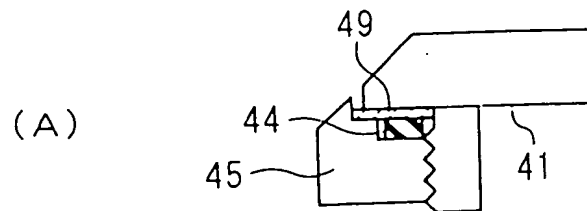
Fig. 24

	BEFORE CHANGE	AFTER CHANGE
RESONANT FREQUENCY (KHz)	41.9	41.7
GAIN (dB)	-49.86	-49.47
BANDWIDTH (Hz)	8305	8253
Q	5.00	5.02

Fig. 25

	BEFORE CHANGE	AFTER CHANGE
RESONANT FREQUENCY (KHz)	41.9	41.3
GAIN (dB)	-49.86	-49.3
BANDWIDTH (Hz)	8305	7959
Q	5.00	5.18

Fig. 26



(B)

	BEFORE CHANGE	AFTER CHANGE
RESONANT FREQUENCY (KHz)	41.9	41.8
GAIN (dB)	-49.86	-49.3
BANDWIDTH (Hz)	8305	7806
Q	5.00	5.25

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Fig. 27

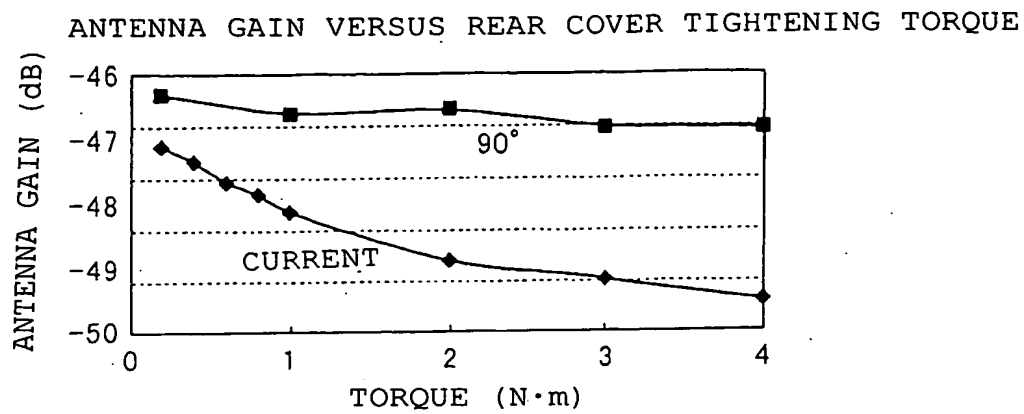
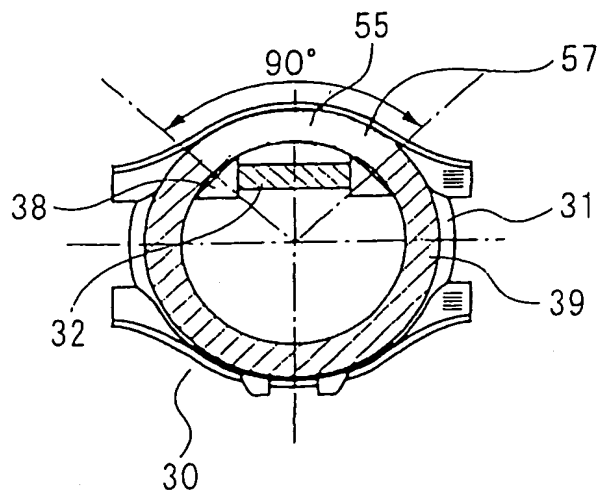


Fig. 28



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Fig. 29

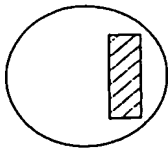
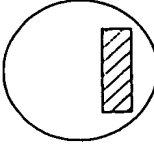
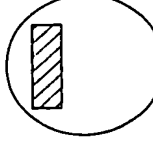
	MASS PRODUCTION SAMPLE A	PRE-PRODUCTION SAMPLE B	SAMPLE C	SAMPLE D T1	SAMPLE E SS	PRE-PRODUCTION SAMPLE F
RESONANT FREQUENCY (KHz)	40.9	41.2	41.3	41.8	41.0	41
GAIN (dB)	-47.7	-48.77	-47.4	-51.3	-49.54	-44.5
BANDWIDTH (Hz)	7130	7609	6195	8239	7351	4704
Q	5.69	5.35	6.66	5.07	5.56	8.67

Fig. 30

	SAMPLE D Ti		SAMPLE E SS	
	BEFORE CHANGE	AFTER CHANGE	BEFORE CHANGE	AFTER CHANGE
RESONANT FREQUENCY (KHz.)	41.8	41.6	41.0	40.4
GAIN (dB)	-51.3	-48.7	-49.54	-46.8
BANDWIDTH (Hz)	8239	6877	7351	6434
Q	5.07	5.99	5.56	6.27

Notes: bolting torque is fixed 3 N·m.

Fig. 31

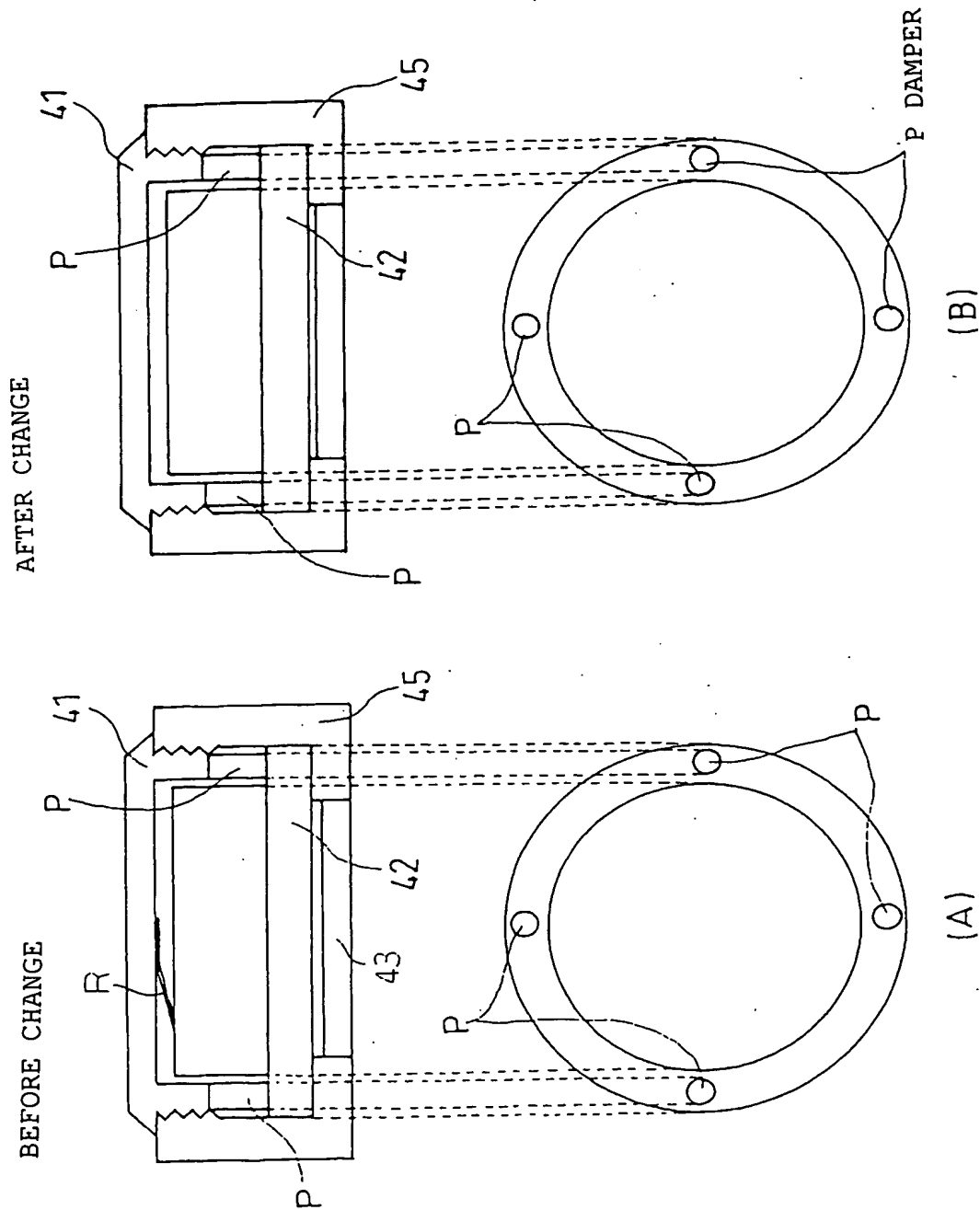
	no cut 		 cut part		 cut part	
RESONANT FREQUENCY (KHz)	41	61.6	40	59	41.3	61.2
ref(dB)	-48.8	-48.8	-45.96	-46.3	-48.1	-48.2
ΔF	7928	13798	5816	11090	7309	13213
Q	5.14	4.42	6.86	5.3	5.55	4.6



ANGLE	LENGTH (B)	RATIO (B/A)
10	2.614617	0.217885
30	7.76441	0.647034
50	12.6783	1.056525
120	25.98043	2.165036
180	30	2.5

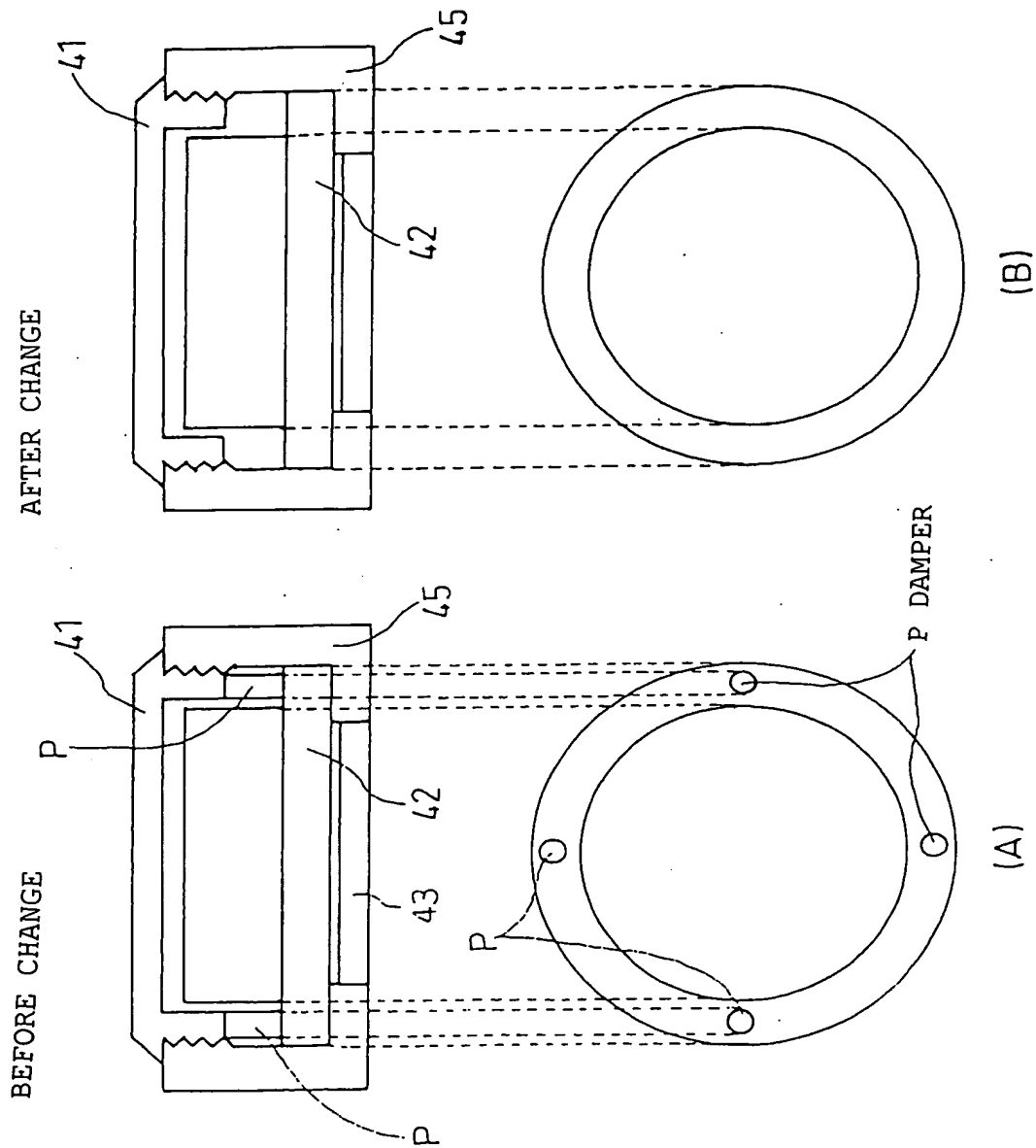
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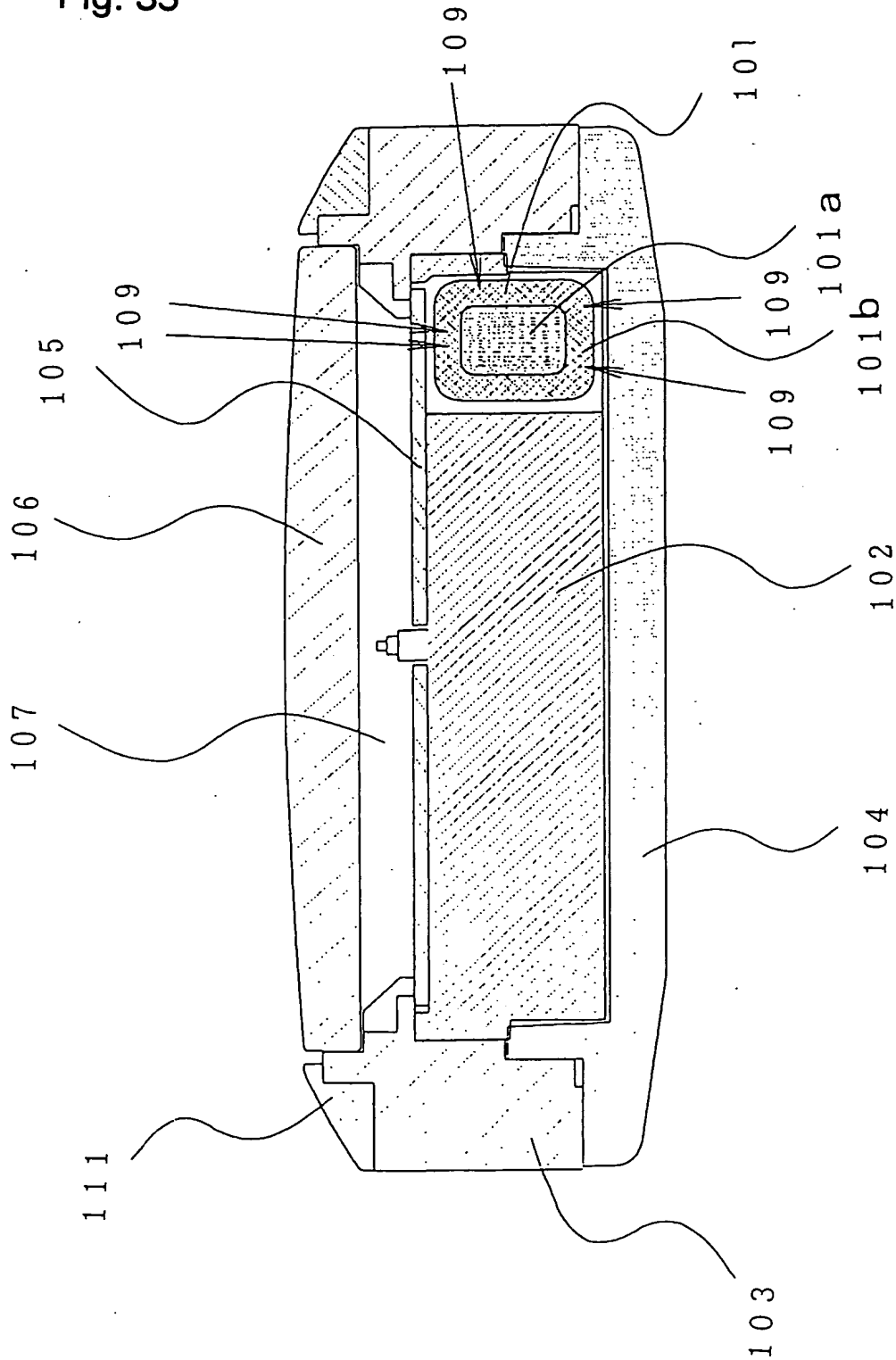
Fig. 33



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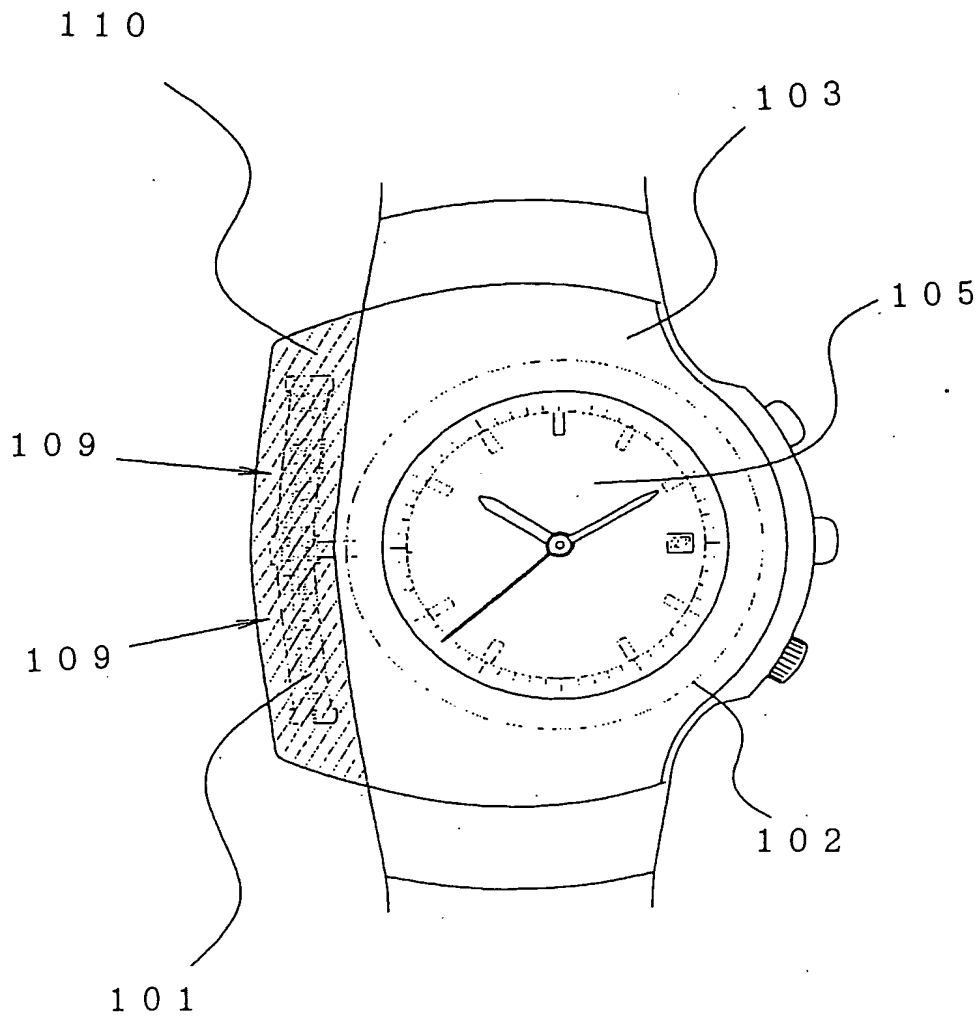
Fig. 34





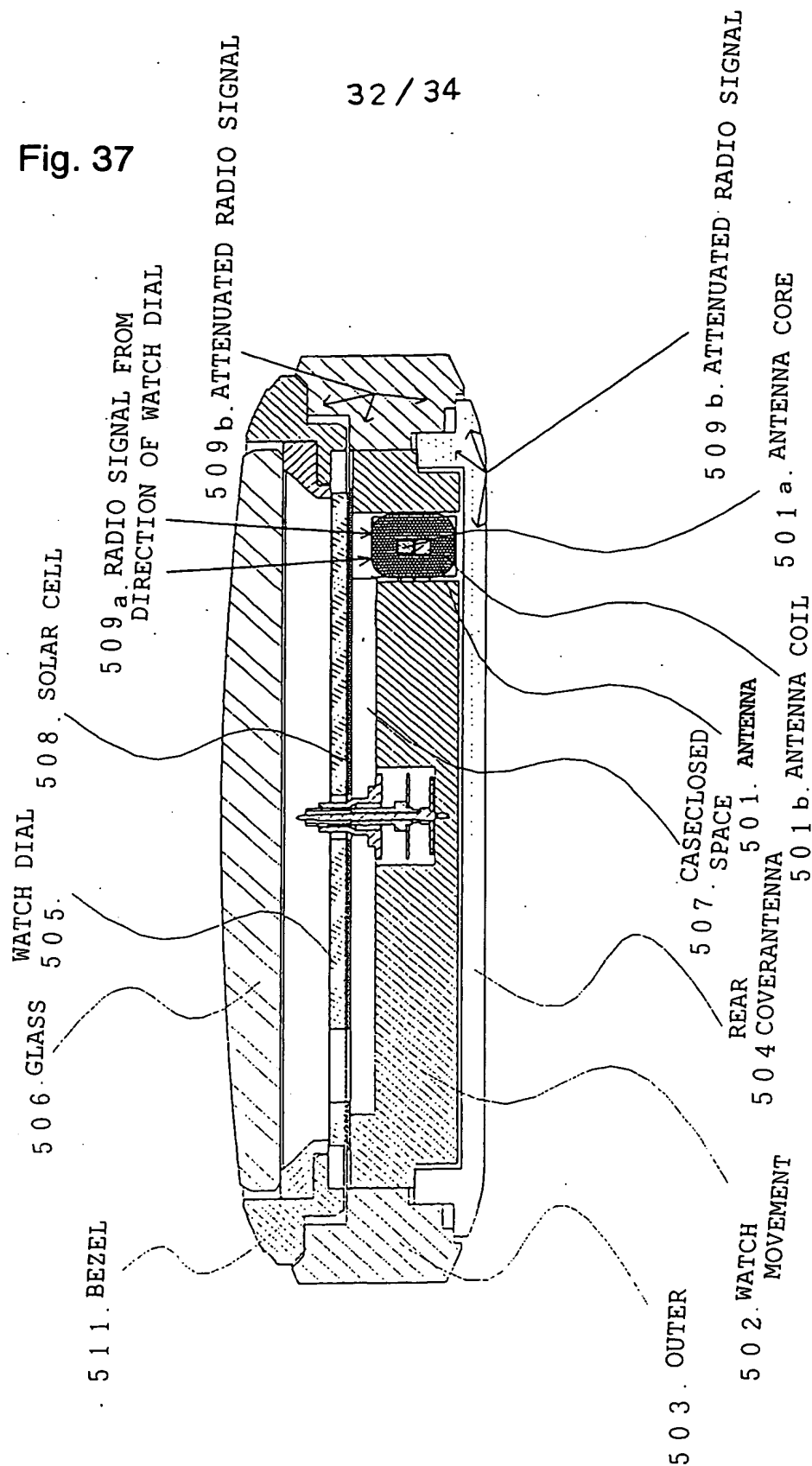
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Fig. 36



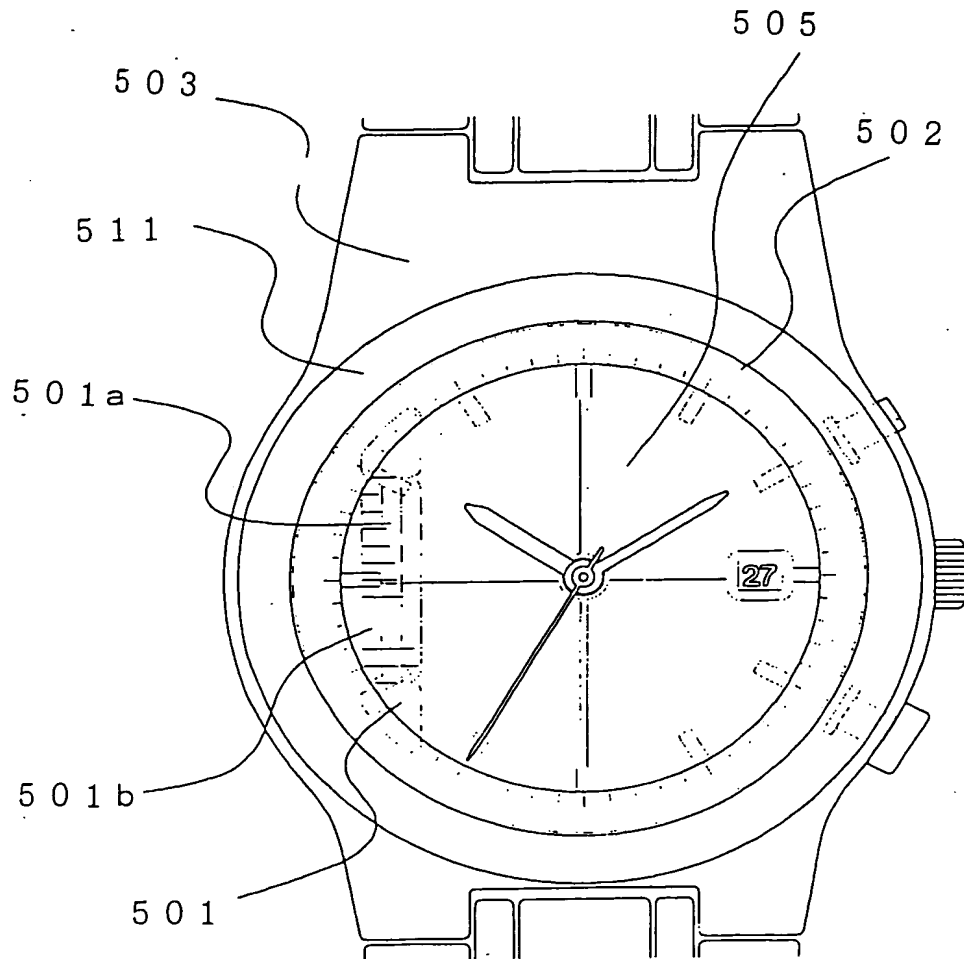
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Fig. 37



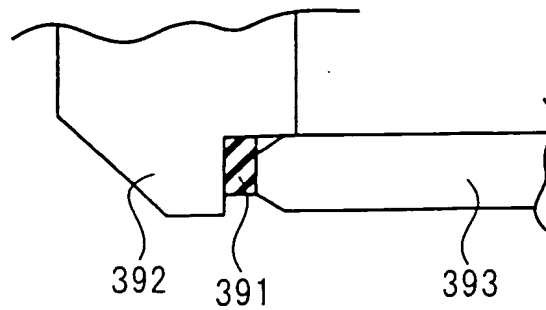
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Fig. 38



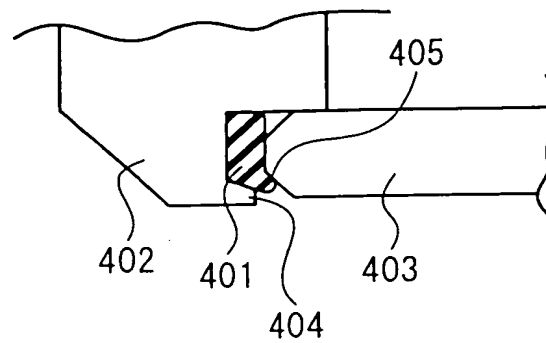
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Fig. 39



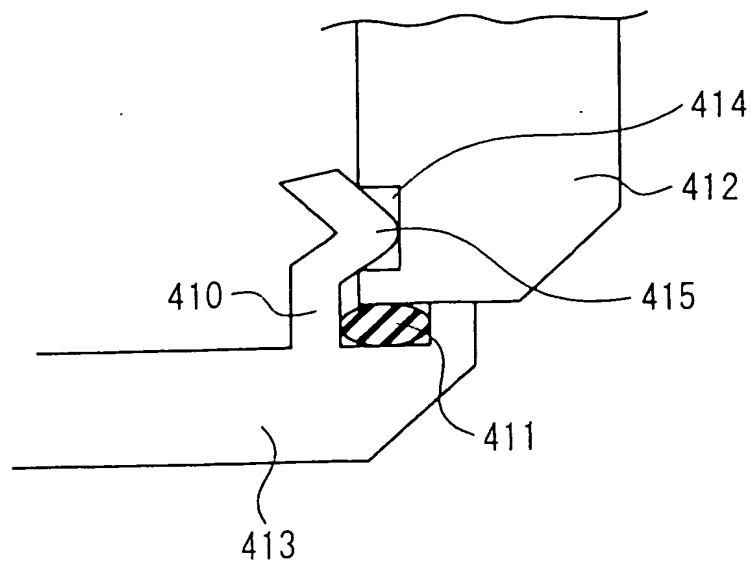
(GN-4)

Fig. 40



(GN-7)

Fig. 41



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